

REMOTE SENSING OF ENVIRONMENT

An Interdisciplinary Journal

Volume 8, 1979

Contents

Editorial	1
K. YA. KONDRATYEV and O. M. POKROVSKY (Leningrad, U.S.S.R.) A Factor Analysis Approach to Optimal Selection of Spectral Intervals for Multipurpose Experiments in Remote Sensing of the Environment and Earth Resources	3
STEPHEN P. FULLER (Vancouver, B.C., Canada) and WAYNE R. ROUSE (Hamilton, Ontario, Canada) Spectral Reflectance Changes Accompanying a Post-Fire Recovery Sequence in a Subarctic Spruce Lichen Woodland	11
W. FRANK MILLER and BRADLEY D. CARTER (Mississippi State, MS) Rational Land Use Decision-Making: The Natchez State Park	25
R. EVANS (Harpenden, England) Air Photos for Soil Survey in Lowland England: Factors Affecting the Photographic Images of Bare Soils and Their Relevance to Assessing Soil Moisture Content and Discrimination of Soils by Remote Sensing	39
GÖKSEL TÜRK (Tucson, AZ) GT Index: A Measure of the Success of Prediction	65
MARVIN E. BAUER, JAN E. CIPRA, PAUL E. ANUTA, and JEANNE B. ETHERIDGE (West Lafayette, IN) Identification and Area Estimation of Agricultural Crops by Computer Classification of LANDSAT MSS Data	77
Announcement	93

Editorial	95
J. F. R. GOWER (Sidney, British Columbia, Canada) The Computation of Ocean Wave Heights From GEOS-3 Satellite Radar Altimeter Data	97
V. R. RAO (Bangalore, India), E. J. BRACH, and A. R. MACK (Ottawa, Ontario, Canada) Bidirectional Reflectance of Crops and the Soil Contribution	115
COMPTON J. TUCKER (Greenbelt, MD) Red and Photographic Infrared Linear Combinations for Monitoring Vegetation	127
D. A. PRATT and C. D. ELLYETT (Newcastle, Australia) The Thermal Inertia Approach to Mapping of Soil Moisture and Geology	151
JOHN C. MUNDAY, JR. (Gloucester Point, VA) and THOMAS T. ALFÖLDI (Ottawa, Ontario, Canada) LANDSAT Test of Diffuse Reflectance Models for Aquatic Suspended Solids Measurement	169
Report	185
Announcement	187
A. MISSALLATI, A. E. PRELAT, and R. J. P. LYON (Stanford, CA) Simultaneous Use of Geological, Geophysical, and LANDSAT Digital Data in Uranium Exploration	189
R. HOFER (Berne, Switzerland) and W. GOOD (Davos, Switzerland) Snow Parameter Determination by Multichannel Microwave Radiometry	211
W. A. COBERLY (Tulsa, OK), J. D. TUBBS (Fayetteville, AK), and P. L. ODELL (Dallas, TX) The Influence of False Color Infrared Display on Training Field Identification	225
C. J. TUCKER (Greenbelt, MD), J. H. ELGIN, JR., J. E. McMURTREY III, (Beltsville, MD), and C. J. FAN (Baltimore, MD) Monitoring Corn and Soybean Crop Development with Hand-Held Radiometer Spectral Data	237
PAUL J. CURRAN (Bristol, England) The Use of Polarized Panchromatic and False Color Infrared Film in the Monitoring of Soil Surface Moisture	249

Short Communications

S. B. IDSO, J. L. HATFIELD, R. D. JACKSON, and R. J. REGINATO
(Phoenix, AZ)

Grain Yield Prediction: Extending the Stress-Degree-Day
Approach to Accommodate Climatic Variability 267

JOHN P. MILLARD (Moffett Field, CA), JERRY L. HATFIELD (Davis,
CA), and ROBERT C. GOETTELMAN (Richmond, CA)

Equivalence of Airborne and Ground-Acquired
Wheat Canopy Temperatures 273

Book Reviews 277

K. T. KRIEBEL (München, Federal Republic of Germany)

Albedo of Vegetated Surfaces:
Its Variability with Differing Irradiances 283

G. F. BYRNE, J. E. BEGG, P. M. FLEMING, and F. X. DUNIN
(Canberra City, Australia)

Remotely Sensed Land Cover Temperature
and Soil Water Status—A Brief Review 291

R. B. POLLOCK and E. T. KANEMASU (Manhattan, KS)

Estimating Leaf-Area Index of Wheat with LANDSAT Data 307

STANLEY R. SCHNEIDER, DAVID F. MCGINNIS, JR., and JOHN A.
PRITCHARD (Washington, D.C.)

Use of Satellite Infrared Data for Geomorphology Studies 313

JANICE P. DARCH (London, England)

A Study Of Moisture Conditions
in the Pantanal of Brazil Using Satellite Imagery 331

Short Communications

B. MØLLER SØRENSEN and G. MARACCI (Ispra, Italy)

Monitoring of Euphotic Depth from Aircraft 349

DONALD E. BARRICK (Boulder, CO)

A Coastal Radar System for Tsunami Warning 353

S. ELWYNN TAYLOR (Auburn, AL)

Measured Emissivity of Soils
in the Southeast United States 359

Book Review 365

Announcements 367

Erratum 368

Author Index to Volume 8 369

Title Index to Volume 8 371

